Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

bright parts of the planet, and the fourth he has colored white, like the polar cap. The positions of the four regions are :

Argyre II	Long. 48°	to 70°	Lat. — 64°	to — 72°
Thyle I	140	186	— 55	— 71
Thyle II	194	243	— 56	— 73
Novissima Thyle	315	332	— 68	— 75

A comparison of the two tables will show that the bright spots and projections observed in 1892–94 were located on SCHIAPARELLI'S four bright regions. On those bright regions, or at least on parts of them, the waning of the polar cap is most retarded. On the Earth we are accustomed to see the snow linger longest in the mountainous regions. If we are permitted to reason from analogy—which is by no means certain—the conclusion to be drawn is that SCHIAPARELLI'S four bright regions, at least in part, are elevated or mountainous.

PLANETARY PHENOMENA FOR APRIL, 1895.

By PROFESSOR MALCOLM MCNEILL.

APRIL.

Mercury passed its greatest west elongation late in March and is still a morning star at the beginning of April, rising a little less than an hour before sunrise; so that it is barely possible that it may be seen if the atmospheric conditions are very favorable. It draws nearer to the Sun during the month, and on April 30 does not rise until a few minutes after sunrise, although it does not reach conjunction until May 4.

Venus is an evening star and is in good position for observation. It remains above the horizon about three hours after sunset at the end of the month. It is gradually increasing its apparent distance from the Sun and will continue to do so until July, when it reaches greatest east elongation. Its real distance from the Sun in miles diminishes slightly throughout the month and it passes perihelion on April 30.

Mars is still in the western sky in the evening, but sets earlier than before—at $11^h\ 22^m$ on April 30. It is moving rapidly eastward among the stars through the eastern part of *Taurus* and western part of *Gemini*. On April 6 it passes about 4° south of the 2d magnitude star *Beta Tauri*. Its actual distance from the Earth is increasing and on April 30 it is distant from us about twice the mean distance of the Earth from the Sun. Its brightness is also diminishing, but it is still bright as compared with an ordinary star.

Jupiter is in the same quarter of the heavens as *Mars*, and the two planets are in conjunction on the evening of April 25, *Mars* passing about three diameters of the Moon north of *Jupiter*. At the beginning of the month, *Jupiter* sets nearly an hour before *Mars*. It is, like *Mars*, moving eastward among the stars, but at a rate only one-fourth as great.

Saturn rises at a little after 8^h on April 1, and before sunset on April 30; it is in opposition on the morning of April 24. It is, therefore, in good position for observation in the southeastern sky, late in the evening. It is retrograding (moving westward) in the constellation *Virgo*, about 15° east of *Spica*, the brightest star of the constellation. The ratio of minor to major axis of the rings is about 5 to 17. This ratio diminishes very slightly for the next two or three months, and then begins to increase again. On the whole there will be an increase of the minor axis relative to the major for several years to come, but there are annual diminutions of small amount owing to change of the position of the Earth in relation to the plane of the rings, due to the annual motion of the Earth around the Sun.

Uranus follows about an hour after *Saturn* and about 7° south. It is about 8° south of the 3d magnitude star *Beta Libræ*.

Neptune is in the constellation *Taurus*, too near the Sun and too faint to be easily seen.

EXPLANATION OF THE TABLES.

The phases of the Moon are given in Pacific Standard time. In the tables for Sun and planets, the second and third columns give the Right Ascension and Declination for Greenwich noon. The fifth column gives the local mean time for transit over the Greenwich meridian. To find the local mean time of transit for any other meridian, the time given in the table must be corrected by adding or subtracting the change per day, multiplied by the fraction whose numerator is the longitude from Greenwich in hours, and whose denominator is 24. This correction is seldom much more than 1^m. To find the standard time for the phenomenon, correct the local mean time by *adding* the difference between standard and local time if the place is west of the standard meridian, and *subtracting* if east. The same rules apply to the fourth and sixth columns, which give the local mean times of rising and setting for the meridian of Greenwich. They are roughly computed for Lat. 40°, with the noon Declination and time of meridian transit, and are intended as only a rough guide. They may be in error by a minute or two for the given latitude, and for latitudes differing much from 40° they may be several minutes out.

The eclipses of *Jupiter's* satellites are those which are visible from some part of the United States. A number of those given take place before sunset on the Pacific Coast, but may be seen in the eastern part of the country. All of them take place off the right-hand limb of the planet and below the belts, as seen in an inverting telescope, and those of the outer satellite "IV," at a considerable distance from the planet. *D* denotes disappearance, *R*, reappearance.

PHASES OF THE MOON, P. S. T.

		H. M.
First Quarter,	April 2,	1 28 P. M.
Full Moon,	April 9,	5 43 A. M.
Last Quarter,	April 16,	3 22 P. M.
New Moon,	April 24,	5 11 P. M.

THE SUN.

1895.	R. A. H. M.	Declination. ° ′	Rises. H. M.	Transits. H. M.	Sets. H. M.
Apr. 1.	0 42	+ 4 33	5 46 A.M.	12 4 P.M.	6 22 P.M.
11.	1 19	+ 8 20	5 30	12 1	6 32
21.	1 56	+ 11 52	5 15	11 59 A.M.	6 43
May 1.	2 34	+ 15 5	5 2	11 57	6 52

MERCURY.

Apr. 1.	23 9	− 7 53	4 52 A.M.	10 29 A.M.	4 26 P.M.
11.	0 3	− 2 28	4 51	10 45	4 39
21.	1 5	+ 4 45	4 50	11 8	5 26
May 1.	2 18	+ 13 7	4 54	11 42	6 30

VENUS.

Apr. 1.	2 31	+ 15 7	6 57 A.M.	1 53 P.M.	8 49 P.M.
11.	3 19	+ 19 4	6 51	2 2	9 13
21.	4 9	+ 22 13	6 48	2 12	9 36
May 1.	5 0	+ 24 22	6 50	2 23	9 56

Mars.

1895.	R. A. H. M.	Declination. ° ′	Rises. H. M.	Transits. H. M.	Sets. H. M.
Apr. 1.	5 5	+ 24 25	8 54 A.M.	4 27 P.M.	11 59 P.M.
11.	5 32	+ 24 49	8 40	4 14	11 48
21.	5 58	+ 24 57	8 26	4 1	11 36
May 1.	6 25	+ 24 49	8 14	3 48	11 22

Jupiter.

Apr. 1.	5 55	+ 23 27	9 46 A.M.	5 16 P.M.	12 46 A.M.
11.	6 0	+ 23 29	9 13	4 42	12 11
21.	6 7	+ 23 29	8 40	4 9	11 38 P.M.
May 1.	6 14	+ 23 28	8 8	3 37	11 6

Saturn.

Apr. 1.	14 17	— 10 51	8 14 P.M.	1 40 A.M.	7 6 A.M.
11.	14 14	— 10 36	7 31	12 58	6 25
21.	14 11	— 10 21	6 48	12 16	5 44
May 1.	14 8	— 10 6	6 2	11 30 P.M.	4 58

Uranus.

Apr. 1.	15 8	— 17 14	9 29 P.M.	2 31 A.M.	7 33 A.M.
11.	15 7	— 17 9	8 48	1 50	6 52
21.	15 5	— 17 2	8 7	1 10	6 13
May 1.	15 3	— 16 56	7 26	12 29	5 32

Neptune.

Apr. 1.	4 49	+ 20 59	8 51 A.M.	4 10 P.M.	11 29 P.M.
11.	4 50	+ 21 2	8 12	3 31	10 50
21.	4 51	+ 21 4	7 34	2 53	10 12
May 1.	4 52	+ 21 6	6 54	2 15	9 34

ECLIPSES OF *JUPITER'S* SATELLITES, P. S. T.

		H. M.			H. M.
I R.	Apr. 5,	7 40 P.M.	III D.	Apr. 17,	5 7 P.M.
II R.	6,	7 53	III R.	17,	8 7
III R.	10,	4 6	I R.	21,	6 0
I R.	12,	9 36	III D.	24,	9 7
II R.	13,	10 29	IV D.	27,	5 30
I R.	14,	4 5	IV R.	27,	8 7